

Monolithic silica tip for digestion of protein

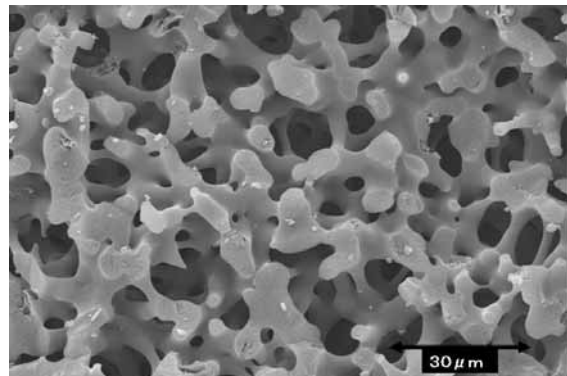
MonoTip[®] Trypsin

MonoTip Trypsin is available to digest of proteins in proteomics analysis. Monolithic silica is consisted of double pore structure with having continuous through-pores and silica skeletons which have meso-pores. Silica skeletons make network structure. <below>The unique monolithic silica structure contributes to low pressure-drop and strong analyte-to-surface interactions.

MonoTip Trpsin(TPCK treated Bovine Pancreas immobilized on monolith silica) catalyzed quick digestion of reduced and alkylated proteins with merely few times operation at room temperature.

Feature

- : Faster sample preparation
enzyme action about aspirate/expel 10x,
at room temperature
- : Low Sample Loss
- : No contamination from self digestion
of trypsin and monolithic silica
- : Large sample capacity(~100ug protein)



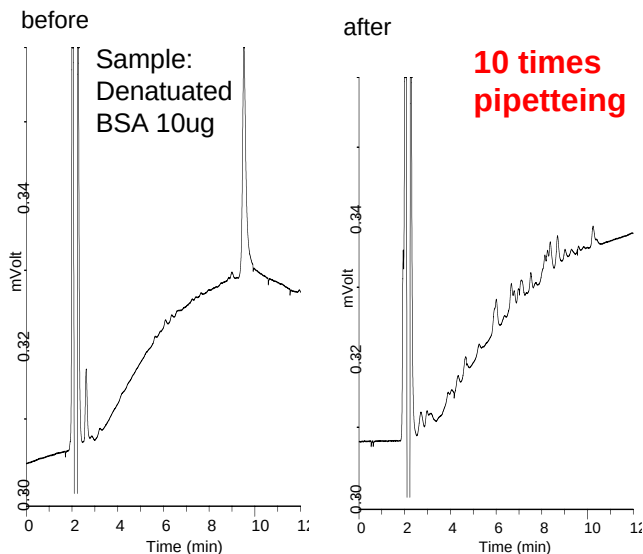
MonoTip[®] Trypsin

Monolithic silica properties and Chemical modification

Silica type	: High purity sol-gel silica gel
Specific surface area	: 100m ² /g
Through pore size	: 10~20μm
Meso pore size	: 30nm
Bonded phase	: TPCK treated trypsin(bovine)
Tip volume	: 200μL
Sample capacity	: 100μg <denatuated bsa>
	: 2.5 BAEE unit/tip
Enzyme buffer	: 50mM ammonium bicarbonate(pH8.0)



Digestion by few times pipetteing



Condition

Column : Inertsil WP300 C8
(5 μ m, 150x4.6mm I.D.)

Eluent : A) 0.1%TFA in H₂O
B) 0.1%TFA in CH₃CN
A/B=90/10-10min-40/60

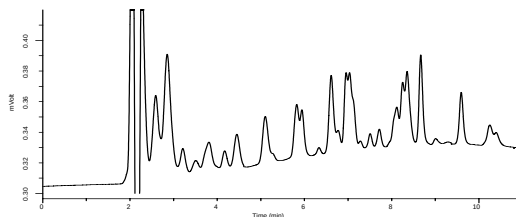
Flow rate : 1mL/min

Col.Temp.: 35°C

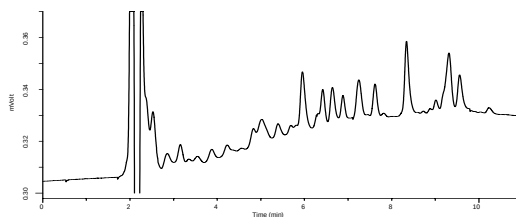
Detection : UV 210nm

Large sample capacity

1mg/ml Denaturated BSA **100ug** (after Digestion)



1mg/ml Denaturated Transferrin **100ug** (after Digestion)



Condition

Column : Inertsil WP300 C8
(5 μ m, 150x4.6mm I.D.)

Eluent : A) 0.1%TFA in H₂O
B) 0.1%TFA in CH₃CN
A/B=90/10-10min-40/60

Flow rate : 1mL/min

Col.Temp.: 35°C

Detection : UV 210nm

“ Based on monolithic technology, Merck KGaA, Darmstadt, Germany ”



GL Sciences Inc.

22-1 Nishishinjuku 6-chome, Shinjuku-ku, Tokyo 163-1130, Japan
International Department TEL: +81-3-5323-6620 Fax: +81-3-5323-6621